

JANUARY 1998

**Section 10.0 of NHDES CONTAMINATED SITES
RISK CHARACTERIZATION AND MANAGEMENT POLICY
(RCMP)**

10.0:	Remedial Action Completion
10.1:	Purpose
10.2:	General Provisions for Completion of Remedial Actions and Site Closure
10.3	Certificate of Completion
10.4:	Certificate of No Further Action
10.5:	Content of Completion Reports for Certificates of Partial Completion and Completion
10.6:	Content of Request for a Certificate of No Further Action

10.0: Remedial Action Completion

10.1: Purpose

This Section establishes requirements and procedures for: 1) determining when remedial actions are completed, and 2) documenting the activities and information necessary to support a Certificate of Completion or a Certificate of No Further Action.

10.2: General Provisions for Completion of Remedial Actions and Site Closure

- (1) NHDES has the statutory authority under RSA 147-F to issue two types of certificates to document that certain stages of the remedial action process have been completed.
 - (a) A Certificate of Completion is issued when the active components of the RAP have been completed and the performance standards specified in the RAP and/or the Groundwater Management Permit have been achieved. A RAP Completion Report must accompany the request for issuance of a Certificate of Completion and must meet the requirements of Section 10.5.
 - (b) A Certificate of No Further Action is issued when the site does not require significant additional oversight by NHDES, the RAP has been completed and the Groundwater Management Permit has been terminated. A request for a Certificate of No Further Action must meet the requirements specified in Section 10.6.
- (2) Remedial actions must be completed in accordance with the requirements of an approved RAP (Env-Ws 410.23), this section and schedules approved by NHDES. If the remedial action does not achieve the performance standards contained in the RAP and the

Groundwater Management Permit, a modified RAP will be implemented in accordance with NHDES approved schedules, this section and applicable state rules and regulations.

- (3) At all sites where groundwater quality exceeds GW-1 standards, the following actions must be taken prior to Completion of a remedial action:
- (a) If a source area is present, the source must be either treated, removed or contained. Additionally, the dissolved portion of the plume must be evaluated against the criteria listed in Env-Ws 410.24 to determine:
 - 1. if active treatment of groundwater is required to restore groundwater quality or contain groundwater contamination; or
 - 2. if groundwater quality may be restored by natural attenuation to AGQS.
 - (b) Groundwater exceeding GW-1 standards must be contained within a Groundwater Management Zone (GMZ) delineated and established in accordance with Env-Ws 410.
 - (c) A Groundwater Management Permit must be obtained to monitor groundwater quality within and at the boundary of the GMZ.

10.3: Certificate of Completion

- (1) A Certificate of Completion certifies that:
- (a) the activities specified in an approved RAP have been completed and the performance standards specified in the RAP and Groundwater Management Permit have been achieved;
 - (b) any necessary Activity and Use Restrictions have been implemented;
 - (c) any monitoring requirements are being met; and
 - (d) all fees and costs due under RSA 147-F have been paid.
- (2) A Certificate of Partial Cleanup can be provided prior to the issuance of a Certificate of completion at the discretion of the NHDES. The purpose of a Certificate of Partial Cleanup is to document that substantial progress has been made toward the implementation of a RAP. Examples of remedial action milestones that might qualify for a Certificate of Partial Cleanup are as follows:
- (a) the completion of a key phase of activity (e.g., source removal);
 - (b) the completion of the remedial action at a key portion of the site;
 - (c) the implementation of any necessary Activity and Use Restrictions.

10.4: Certificate of No Further Action

- (1) A Certificate of No Further Action certifies that:
- (a) no further investigation, remediation or other actions are required;
 - (b) any necessary Activity and Use Restrictions have been implemented or no further Activity and Use Restrictions are required;
 - (c) any monitoring requirements necessary to implement an Activity and Use

Restriction are being met or no monitoring requirements are required; and
(d) all fees and costs due under RSA 147-F have been paid.

- (2) A Certificate of No Further Action is issued for sites where remedial actions, site investigations, risk characterization or monitoring activities have determined that:
- (a) The sole source of a site's risk is due to contaminated groundwater migrating from an upgradient property (see R.S.A Chapter 266 or SB 532 for additional details); or
 - (b) Sources of on-site contamination have been sufficiently addressed to conclude that:
 - (1) Sources of contamination which could result in an increase in concentrations of contaminants in an environmental medium, either as a consequence of a direct discharge or through inter-media transfer of contamination, do not exist (Note: The downgradient leading edge of a plume of one or more contaminants dissolved in and migrating with groundwater is not, in and of itself, considered a source of contamination);
 - (c) contaminant concentrations in soil are below the applicable Soil Standards (Method 1, 2 or 3 standards developed for the site) or exposure to contaminated soil is managed by a NHDES approved Activity and Use Restriction; and
 - (d) contaminant concentrations in groundwater are in compliance with GW-1 standards and any existing groundwater management permit terminated.

10.5: Content of Completion Reports for Certificates of Partial Completion and Completion

- (1) A Completion Report for a Certificate of Completion or Certificate of Partial Completion must include, at a minimum, the following:
- (a) the site name, address and NHDES Site Number(s);
 - (b) for response actions where a threat of release has been abated, the Method(s) (Methods 1, 2, or 3) used to characterize the risk of harm posed by the site to human health and the environment;
 - (c) the relationship of the requested certificate to any other certificate that has been filed for the site or portion thereof, if applicable, together with a statement as to whether any additional remedial actions are needed for any other portions of the site;
 - (d) when the active components of an approved RAP have not achieved applicable Soil and Groundwater Standards, a discussion must be provided on how compliance with the standards will be achieved (e.g., natural attenuation and Activity and Use Restrictions) and demonstrated (e.g., plans for future groundwater monitoring and/or soil sampling).
 - (e) a discussion of an Activity and Use Restriction implemented at the site.
- (2) Except where previously submitted, all documentation, plans and/or reports necessary to support the Completion Report must be submitted to NHDES and must include the following:
- (a) a clear and accurate description of the location of the site or the location and

boundaries of the site or portion of the site to which the Completion Report applies. Such description must reference, to the extent practicable, the location of the site, and location and boundaries of the site or portion thereof relative to permanent or semi-permanent landmarks, and/or surveyed boundaries;

(b) a demonstration that all uncontrolled sources have been eliminated or controlled;

(c) information supporting the conclusion that no substantial hazards remain at the site;

(d) a copy of any and all Activity and Use Restrictions which have been implemented;

(e) a description of any operation, maintenance, and/or monitoring that will be required to confirm and/or maintain those conditions at the site upon which the remedial action is based; and

(3) For all remedial actions where applicable Soil and Groundwater Standards have not been achieved the Completion Report must include the following:

(a) a modified remedial action plan, if additional active remedial measures are required;

(b) a description of any additional steps that will be taken, including monitoring and Activity and Use Restrictions, to ensure site conditions that are protective to human health and the environment.

(c) a periodic evaluation of the remedial action must be conducted in accordance with a schedule approved by NHDES until such time that a Certificate of No Further Action has been attained.

10.6: Content of Request for a Certificate of No Further Action

(1) A Request for a Certificate of No Further Action must include, at a minimum, the following:

(a) the site name, address and NHDES Site Number(s);

(b) Method(s) (Methods 1, 2, or 3) used to characterize the risk of harm posed by the site to human health and the environment;

(c) A summary of the most recent groundwater and soil quality results and a comparison of the results to applicable Soil and Groundwater standards (Method 1,2 or 3 standards derived for the site);

(d) for a site where a remedial action was conducted, information supporting the conclusion that the response actions have achieved applicable Soil and Groundwater Standards;

(e) indication as to whether the Request for a Certificate of No Further Action is based upon the implementation of an Activity and Use Restriction, and if so, the type of Activity and Use Restriction implemented at the site.

(f) the relationship of the Request for a Certificate of No Further Action to any Certificate of Completion that has been filed for the site or portion thereof, if applicable, together with a statement as to whether any additional response actions are needed for any other portions of the site;

(2) Except where previously submitted, supporting documentation, plans and/or reports necessary to support the Request for a Certificate of No Further Action must be submitted to NHDES and must include the following:

- (a) a clear and accurate description of the location of the site or the location and boundaries of the site or portion of the site to which the Request for a Certificate of No Further Action applies. Such description must reference, to the extent practicable, the location of the site, and location and boundaries of the site or portion thereof relative to permanent or semi-permanent landmarks, and/or surveyed boundaries;
- (b) a copy of any and all Activity and Use Restrictions which have been implemented; and
- (c) a description of any monitoring that will be required to confirm and/or maintain those conditions at the site upon which the Request for a Certificate of No Further Action is based.

11.0: Activity and Use Restrictions

Sections 11.0 through 11.5 are cited collectively as the Activity and Use Restrictions Section.

11.1: Application of Activity and Use Restrictions

(1) The purpose of an Activity and Use Restriction is to narrow the scope of exposure assumptions used to characterize risks to human health from a release pursuant to Sections 1.0 to 10.0 by specifying activities and uses that will be prohibited and allowed at the site in the future. Activity and Use Restrictions are intended to ensure that proposed changes in the use of a site are evaluated for any increased exposure to remaining contamination. This section establishes criteria for determining when an Activity and Use Restriction must be used, when one cannot be used, and when one may be a factor to be considered in appropriately characterizing soil and groundwater at a site.

(2) Activity and Use Restrictions are required:

(a) at all sites or portions of sites for which the Risk Characterization depends upon the restriction of Site Activities and Uses to achieve or maintain protection of human health and/or environment including:

1. any site for which a Risk Characterization is based on Method 1 or 2 Soil Standards and the Exposure Point Concentrations of contaminants exceed the S-1 standards but meet applicable S-2 or S-3 standards; and
2. any site where a Method 3 Risk Characterization relies on reduced exposure potential due to the assumption of limited site use; and

(b) at all sites for which the Risk Characterization relies upon Exposure Pathway elimination measures to prevent exposure to levels of contamination that would otherwise pose a significant risk of harm to human health or the environment.

(3) A Groundwater Management Zone that has been established and is being monitored under the provisions of a Groundwater Management Permit is the appropriate Activity and Use Restriction for groundwater at a site that contains contaminant concentrations in groundwater that exceed AGQS. No additional requirements for contaminated groundwater above and beyond the provisions of Env-Ws 410 are required to implement this type of Activity and Use Restriction under the provisions of this section.

(4) Activity and Use Restrictions:

- (a) must provide notice to holders of any interest(s) in a property or a portion thereof (including without limitation, owners, lessees, tenants, mortgagees, and holders of easement rights) of the existence and location of contamination at such property and the Activity and Use Restrictions that have been implemented in response thereto; and
- (b) establish a duty to evaluate risks associated with proposed changes in Site Activities and Uses on the subject property that could increase the risk of harm to human health or the environment and to perform additional response actions prior to any such change in Site Activities and Uses.

(5) Any Activity and Use Restrictions applied at a site pursuant to this policy must be instituted and maintained in accordance with the relevant requirements of NHDES.

11.2: Implementation of Activity and Use Restrictions

Activity and Use Restrictions imposed pursuant to this policy must be implemented and

adhered to by the owner and holders of interest(s) in the property and/or a license to use the property subject to the Activity and Use Restriction, and person(s) conducting response actions at the site in accordance with the procedures established in this policy.

(1) Contents of an Activity and Use Restrictions Proposal

A request for Activity and Use Restrictions must contain the following information:

- (a) a description of the property and site, including:
 - 1. the location of the property and its street address;
 - 2. a metes and bounds description of the property that is subject to the Activity and Use Restrictions; and
 - a. a recordable or registerable plan of such property prepared by a New Hampshire Registered Land Surveyor or a New Hampshire Registered Professional Engineer; or
 - b. a reference to a survey plan of such property that has been recorded and/or registered;
 - 3. if the area subject to the Activity and Use Restrictions (i.e., "the Restricted Area") comprises only a portion of the property, a metes and bounds description of the Restricted Area; and
 - a. a recordable or registerable plan of the Restricted Area prepared by a New Hampshire Registered Land Surveyor or a New Hampshire Registered Professional Engineer; or
 - b. a reference to a survey plan of the Restricted Area that has been recorded and/or registered. If the entire property is to be restricted then a separate plan for the Restricted Area need not be included; and
 - 4. a sketch plan showing the location of the Restricted Area in relation to the boundaries of the site to the extent that the boundaries of the site have been established;
- (b) name(s) of the property owner(s) and, for Brownfields Program participants (RSA 147-F) that do not own the property, the relationship to the owner;
- (c) the site name and NHDES Site Number(s);
- (d) the time period during which the Activity and Use Restrictions must be in place;
- (e) a precise description of the Site Activities and Uses which must be prohibited on the property such as:
 - 1. construction or placement of buildings, utilities, roadways, parking lots or other structures;
 - 2. excavating, dredging or otherwise removing sediments, soils, loam, peat, sand, gravel, rock or other mineral substance;
 - 3. planting, removal or destruction of trees, shrubs, or other vegetation;
 - 4. using a private well to supply groundwater for human consumption;
 - 5. use of the property as a park, playground or school; or
 - 6. other Site Activities and Uses which would likely result in significant risk or a substantial hazard from exposures to contaminants if the Site Activity and Use were to take place on the property;
- (f) a precise description of the measures which will be taken to ensure compliance with restrictions. Such obligations may include the continued proper operation of remedial actions, specific procedures governing excavation activities to protect workers and site neighbors, and the erection and maintenance of fences to prohibit access of unauthorized persons to the site;
- (g) a precise description of Site Activities and Uses which are permitted on the subject property, including without limitation specific provisions for purposes of maintenance, alteration, or repair of utilities, or specific types of land uses and how the restrictions

will eliminate the site's risks to human health and the environment;

(h) procedures to be followed when an emergency requires immediate excavation of contaminated soil to repair utility lines or other infrastructure on the site, or to respond to other types of emergencies (*e.g.*, fire or floods) that may result in a significant risk of harm from exposure to contaminants at the site, including:

1. notifying NHDES of such emergency condition;
2. limiting disturbance of contaminated media to the minimum reasonably necessary to adequately respond to the emergency; and
3. undertaking specified precautions to reduce exposure of workers and neighbors of the site, to contaminated media (*e.g.*, the need for specific types of protective clothing for workers conducting the excavation, and procedures for minimizing the liberation of contaminated dust); and
4. engaging the services of an environmental consulting firm to prepare or supervise preparation and implementation of a written plan for restoring the site to a condition consistent with the Activity and Use Restrictions, and to review and evaluate response actions to ensure minimal disturbance of contaminated media;

(i) an acknowledgment that the Activity and Use Restrictions shall run with the land, in accordance with RSA 147-E:16(II) and an analysis of the long-term feasibility of maintaining such use restrictions;

(j) an agreement to incorporate either in full or by reference the Activity and Use Restrictions into all deeds, easements, mortgages, leases, licenses, occupancy agreements, or any other instruments conveying an interest in and/or a right to use the property. The proposed deed language should be submitted to NHDES with the Activity and Use Restriction proposal;

(k) the procedures for amending and releasing the Activity and Use Restrictions;

(l) title reference by which the property owner(s) acquired title to the property; and

(m) the notarized signature(s) of the property owner(s).

(2) Recording/Registering Activity and Use Restrictions

(a) The Activity and Use Restrictions shall be recorded in a format approved by NHDES at the appropriate Registry of Deeds and/or Land Registration Office within 30 days of the applicant's receipt of approval of the Activity and Use Restriction proposal from NHDES. A certified Registry copy of the Activity and Use Restrictions bearing the book and page/instrument number and/or document number shall be submitted to NHDES within 30 days of its date of recordation and/or registration.

(3) Approvals of Requests for Activity and Use Restrictions

(a) For each application for an Activity and Use Restrictions, NHDES must prepare a statement specifying that the request is approvable, or, as appropriate, a statement describing the basis for disapproving the request.

(b) Activity and Use Restrictions that are approved by NHDES become effective upon recordation.

11.3: Modifications of Activity and Use Restrictions

(1) Any modification of an Activity and Use Restriction must be approved by NHDES before the change in activity or use is implemented.

(2) Additional remedial actions required to maintain Soil and Groundwater Standards, or to eliminate a substantial hazard, for the contemplated changes in Site Activities and/or Uses must

be completed before the new or altered activities commence.

(3) An Activity and Use Restriction must be modified when necessary to meet the objectives of the Activity and Use Restriction (e.g., either to maintain Soil and Groundwater Standards, or to eliminate a substantial hazard for the new or altered Site Activities and Uses). NHDES must approve any modification to an Activity and Use Restriction.

(4) An Activity and Use Restriction may also be modified to expand or reduce the list(s) of prohibited and/or permitted Site Activities and Uses, and obligations and/or conditions listed therein based on changed circumstances or other grounds.

(5) Activity and Use Restrictions must be amended in accordance with the following:

- (a) the proposed modification must be submitted to NHDES in the form required by Section 11.2 (1);
- (b) the modification shall be recorded at the appropriate Registry(ies) of Deeds and/or Land Registration Office(s) within 30 days of owner's receipt of NHDES approval; and
- (c) a certified Registry copy of the modified Activity and Use Restrictions bearing the book and page/instrument numbers and/or document number must be submitted to NHDES within 30 days of its date of recordation and/or registration.

11.4: Release of Activity and Use Restrictions

(1) In cases where, as a result of additional response actions conducted at a site or a portion of a site, an Activity and Use Restriction is no longer necessary to maintain the protection of human health and the environment, or to eliminate a substantial hazard, such Activity and Use Restriction must be released or terminated pursuant to the procedures described below.

(2) A Notice of Activity and Use Restriction may be terminated in accordance with the following procedures:

- (a) a request must be submitted to NHDES to terminate the Activity and Use Restriction the request which includes an explanation as to why the Activity and Use Restriction is no longer necessary to maintain the protection of human health and the environment;
- (b) upon approval of the request by NHDES, the termination must be prepared, recorded and/or registered by the property owner at the appropriate Registry of Deeds and/or Land Registration Office. Such amendment must also be marginally referenced on the deed for the subject property;
- (c) a certified Registry copy of the termination bearing the book and page/instrument numbers and/or document number must be submitted to NHDES within 30 days of its date of recordation and/or registration; and
- (d) supporting documentation reflecting any changes to the site's Risk Characterization as the result of additional remedial actions and the termination of the Notice of Activity and Use Restriction must be submitted to NHDES.

11.5: Checklist for AUR

(1) Figure 3 contains a checklist for the completion of an AUR.